

**WHAT IS CLAIMED IS:**

1. An apparatus for manufacturing a semiconductor device, comprising:

5 plasma detecting means provided inside an upper electrode for supplying gas, of a parallel-plate type dry etching apparatus.

2. The apparatus according to claim 1, wherein  
10 said upper electrode comprises a cooling plate having a plurality of gas supply holes for supplying the gas, a gas-introducing plate having gas holes for introducing the gas into a semiconductor wafer, a jig for fixing said gas-introducing plate to said cooling plate, and a sensor  
15 for detecting plasma, which is provided between said gas-introducing plate and said cooling plate.

3. An apparatus for manufacturing a semiconductor device, comprising:

20 pressure detecting means provided inside an upper electrode for supplying gas, of a parallel-plate type dry etching apparatus.

4. The apparatus according to claim 3, wherein  
25 said upper electrode comprises a cooling plate having a plurality of gas supply holes for supplying the gas, a gas-introducing plate having gas holes for introducing

the gas into a semiconductor wafer, a jig for fixing said gas-introducing plate to said cooling plate, and means for detecting pressure, which is provided between said gas-introducing plate and said cooling plate.

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5. An apparatus for manufacturing a semiconductor device, comprising:

first pressure detecting means provided inside an upper electrode for supplying gas, of a parallel-plate type dry etching apparatus; and

second pressure detecting means provided within an etching-processing chamber in which a wafer is placed.

6. The apparatus according to claim 5, further including means for connecting said first pressure detecting means and said second pressure detecting means and detecting the difference between pressure detected by said first pressure detecting means and pressure detected by said second pressure detecting means.

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7. The apparatus according to claim 5, wherein said upper electrode comprises a cooling plate having a plurality of gas supply holes for supplying the gas, a gas-introducing plate having gas holes for introducing the gas into a semiconductor wafer, a jig for fixing said gas-introducing plate to said cooling plate, and first pressure detecting means for detecting pressure, which is

provided between said gas-introducing plate and said  
cooling plate, and wherein second pressure detecting  
means is provided within the etching-processing chamber  
in which the wafer is placed.

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